

Evaluation was carried out for the following items. The results are shown in Table 1.

#### 1. Heat cycle test:

Each manufactured display was subjected to a heat cycle test ( $-40^{\circ}\text{C} \leftrightarrow 95^{\circ}\text{C}$ , 120 cycles, temperature raising/decreasing time less than 5 min), and it was observed whether or not abnormalities in the form arose.

#### 2. Contrast

For the displays, a comparison was carried out of the contrast for the case of irradiating light from a fluorescent lamp (1000 lx) onto the display surface from an angle of  $45^{\circ}$ .

#### 3. Driving lifetime

Each display was subjected to continuous driving using low-current passive driving with a constant current value, and a comparison was carried out of the driving time until the retention rate of the brightness relative to the initial brightness reached 50% due to the driving.

#### 4. Efficiency

A comparison was carried out through the brightness in the case of driving each of the displays with a constant current value.

In Table 1, a result greater than 1.0 indicates a better result than for the comparative example; from the results of Table 1, it was found that the examples are superior to the comparative example.

(Table 1)

Summary of evaluation results

	Example 1	Example	Comparative example
1. Heat cycle	No change in form	No change in form	Peeling away of light-emitting device occurs

2. Contrast*	1.0	3.0	1.0
3. Driving lifetime*	1.0	1.5	1.0
4. Efficiency*	1.3	1.0	1.0

\* For the contrast, the driving lifetime, and the efficiency, the value for the comparative example was taken as 1.0.

### INDUSTRIAL APPLICABILITY

According to the present invention, an organic EL display having high reliability and high efficiency can be provided.

Specifically, the organic EL display of the present invention is made to have a constitution in which a stress-relieving layer made of a material having a higher elasticity than an adhesive layer is provided at edges of color-converting filters that are constituted from color filter layers alone, or color filter layers and color-converting layers, and are formed on a transparent supporting substrate; as a result, it can be made to be such that stress arising when bonding the color-converting filters and the organic light-emitting device together, or when there are changes in the environment in which the display is placed is absorbed by the stress-relieving layer, and hence the light-emitting device is not damaged.

Moreover, by making the refractive index of the stress-relieving layer be lower than that of the adhesive layer, reflection at walls of the stress-relieving layer is promoted, and hence the component of the light emitted by the light-emitting device that escapes sideways can be reduced.

Furthermore, by making the structure of the stress-relieving layer be a reverse tapered shape relative to the color-converting filters as shown in FIG. 1, the efficiency of extracting light is further improved.

Moreover, the component reflected at the walls of the stress-relieving layer may cause a drop in contrast. In the case that the contrast is considered to be more important

than the efficiency of extracting light, the material of the stress-relieving layer is made to be a material that absorbs light, whereby the contrast of the panel is improved.

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